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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/667,144

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Michael T. Carley

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EXAMINER

BACHMAN, LINDSEY MICHELE

ART UNIT

PAPER NUMBER

3734

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/667,144	Applicant(s) CARLEY ET AL.	
	Examiner LINDSEY BACHMAN	Art Unit 3734	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17,36-44,50 and 52-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17,36-44,50 and 52-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3-30-10</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to Applicant's amendment filed 23 March 2010.

Response to Arguments

Applicant argues that the device taught by Zadno'893 is not resiliently deformable or configured to return to the planar configuration because Zadno'893 teaches heat treating the device in order to provide the memorized shape and to set the transition temperature. Applicant also argues that Zadno'893 does not explicitly teach placing the cylindrical structure back into the flat configuration.

Regarding Applicant's arguments that Zadno'893 teaches away from element 600 being resiliently deformable, Examiner disagrees. Although Zadno'893 does not explicitly teach everting the cylindrical structure back into its flattened state, this is not teaching away since Zadno'893 does not explicitly teach that it is not desirable to turn the device flat. Further, Applicant's claim is not drawn to the use of the device: Although someone using Zadno'893's device might not be motivated to evert the device back to its flattened configuration that does not mean that it's not capable of being everted, especially since Zadno'893's device is made of the same material as Applicant's.

Examiner disagrees with Applicant's arguments and maintains the present rejection since the new limitation "with the body being configured to return towards the substantially planar configuration" does not add anything beyond the limitation of "resiliently deformable" previously recited.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 17, 37, 39-44, 50, 52, 54-59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zadno-Azizi et al. (US Patent 5,907,893) (Zadno'893) in view of Chuter (US patent 6,942,691).

Claim 17, 40: Zadno'893 teaches a device (600; Figure 20) that has an annular shaped body defining a plane. The body is resiliently deformable from a substantially planar configuration that lies in a plane to a transverse configuration extending out of the plane (Figure 21). The device contains a plurality of looped elements (Figure 20) Each looped element contains a curved outer region connected to a curved inner region so that the outer region is out of phase with an adjacent inner region to form an endless sinusoidal pattern.

Zadno'893 does not teach a plurality of tines extending from the looped elements towards the central axis of the annular shaped body.

Chuter'691 teaches that it is old and well known to provide a similar device (Figure 3) for example with a plurality of tines (52, 58 in Figure 1) that are generally parallel with the central axis in the transverse configuration. The curved region (56) limits the penetration depth of the tines. The tines are used to limit migration when the device is implanted in the body (column 5, lines 55-58). It would have been obvious to one of ordinary skill in the art to provide the device of Zadno'893 with tines as taught by Chuter'691 in order to limit migration of the device when implanted in the body.

Claim 37, 39: The tines of Chuter'691 comprise primary tines (52, 58) and secondary tines (52, 58) which all have a length.

Claims 41, 42: Zadno'893 teaches that the device can be made of a single sheet of material of super elastic alloy (column 12, lines 32-38).

Claim 43, 44: The device of Zadno'893 is expandable and compressible due to its material properties.

Claim 50, 55: Zadno'893 teaches a device (600; Figure 20) that has an annular shaped body defining a plane. The body is resiliently deformable from a substantially planar configuration that lies in a plane to a transverse configuration extending out of the plane (Figure 21). The device contains a plurality of looped elements (Figure 20). Each looped element contains a curved outer region connected to a curved inner region so that the outer region is out of phase with an adjacent inner region to form an endless sinusoidal pattern. Regarding the limitation of a biased spring element, by virtue of the similar shape of the Zadno'893 device to Applicant's invention (specifically the embodiment of Figure 1a), the Zadno'893 device contains a biased spring element.

Zadno'893 does not teach a plurality of tines extending from the looped elements towards the central axis of the annular shaped body.

Chuter'691 teaches that it is old and well known to provide a similar device (Figure 3) for example with a plurality of tines (52, 58 in Figure 1) that are generally parallel with the central axis in the transverse configuration. The curved region (56) limits the penetration depth of the tines. The tines are used to limit migration when the device is implanted in the body (column 5, lines 55-58). It would have been obvious to one of ordinary skill in the art to provide the device of Zadno'893 with tines as taught by Chuter'691 in order to limit migration of the device when implanted in the body.

Claim 52, 54: The tines of Chuter'691 comprise primary tines (52, 58) and secondary tines (52,58) which all have a length.

Claim 56, 57: Zadno'893 teaches that the device can be made of a single sheet of material of super elastic alloy (column 12, lines 32-38).

Claims 58, 59: The device of Zadno'893 is expandable and compressible due to its material properties.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zadno'893 in view of Dwyer et al. (US Patent 5,843,167).

Claim 36: Zadno'893 teaches a device (600; Figure 20) that has an annular shaped body defining a plane. The body is resiliently deformable from a substantially planar configuration that lies in a plane to a transverse configuration extending out of the plane (Figure 21). The device contains a plurality of looped elements (Figure 20) Each looped element contains a curved outer region connected to a curved inner region so that the outer region is out of phase with an adjacent inner region to form an endless sinusoidal pattern.

Zadno'893 does not teach a plurality of arcuate tines extending from the looped elements towards the central axis of the annular shaped body.

Dwyer'167 teaches that it is old and well known to provide a similar device (Figure 1) with a plurality of arcuate tines (24) that are generally parallel to the longitudinal axis of the device in the transverse configuration in order to provide the advantage of preventing movement of the device along the vessel wall.

Claims 38 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zadno'893 in view of Chuter'691, as applied to Claims 17 and 50, further in view of Sakura (US Patent 4,214,587).

Zadno'893 in view of Chuter'691 teach the invention substantially as claimed, but do not teach that the tines are different lengths.

Sakura'587 shows a similar device that contains tines of different lengths (12, 13) in order to have the different tines each serve a different purpose (column 3, line 66 to column 4, line 7). It would be obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Zadno'893 in view of Chuter'691 with the teachings of Sakura'587 in order to provide the same advantage.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINDSEY BACHMAN whose telephone number is (571)272-

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6208. The examiner can normally be reached on Monday to Thursday 7:30 am to 5 pm, and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on 571-272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. B./

Examiner, Art Unit 3734

/Anhtuan T. Nguyen/

Supervisory Patent Examiner, Art Unit 3731

6/20/10